

REMARKS

Receipt of the Office Action of May 20, 2005 is gratefully acknowledged.

Claims 24 and 32 are objected to because of the double recitation of "second" in claim 24 and the lack of antecedent basis for "said first stage" in claim 32. Both claims have been amended to address this objection. In claim 24, the second recitation of "second" has been cancelled, and in claim 32 the dependency has been changed to claim 27.

The rejection of claims 22-26 and 34-43 as anticipated by Gomi et al. under 35 USC 102(b), the rejection of claims 27, 28, 29, 32 and 33 as unpatentable under 35 USC 103(a) by Gomi et al. in view of Henry et al., and the rejection of claims 30 and 31 as unpatentable under 35 USC 103(a) by Gomi et al. in view of Henry et al. and Maginnis are noted.

These rejections have been carefully considered and as a result are respectfully traversed.

The rejections of the noted claims is essentially based on U.S. patent 5,796,012 (*Gomi et al.*), and in particular the disclosure at col. 6, line 15 - col. 7, line 65. Referring to this disclosure the examiner states that *Gomi et al.* discloses all features as claimed in claim 22, and further in claims 23 - 26 and 43 - 43. But all you can read in *Gomi et al.* to this point is that:

"...The present invention is also directed to correction of a change of resonant frequency due to a load P resulted from thermal stresses produced in an inner tube 1 and an outer tube 2 in their axial directions when the inner tube changes its temperature being heated by fluid flowing therein, causing a difference of temperatures of two tubes. The inner tube 1 and the outer tube 2 are provided with temperature sensors bonded one to each tube for detecting wall temperature of the respective tubes. The elastic moduli E and the sectional secondary moments I in Equations (6) and (7) are corrected according to Equations (8) to (11) or Equations (11) and (12), then the natural frequency $f_{sub.2}$ ' of the inner tube 1 and the natural frequency $f_{sub.2}$ ' of the outer tube 2 at their detected temperatures are determined. Further, stresses acting on the inner tube 1 and the outer tube 2 are multiplied by respective correction factors and natural frequencies of

respective tubes when the stresses are applied to them..."
(col. 7, lines 24 ff.),

and further

"...Accordingly, it is possible to make correction for a frequency difference Δf of the resonant frequencies f including the influence of the stresses of respective tubes, which can be calculated by using input temperature signals of respective tubes and Equations (14) and (15) stored in the instrumental-error correcting circuit" (col. 7, lines 60 ff.).

Indeed, neither in *Gomi et al.*, nor in *Henry et al.* (U.S. 6,311,136), nor in *Maginnis* is it disclosed or suggested that "during operation, said meter electronics determine the first correction value from a temporal variation of the at least first temperature measurement signal by also taking into account temperature values sensed in the past by means of said first temperature sensor". Moreover, each of *Gomi et al.*, *Henry et al.*, and *Maginnis* does teach the use of instantaneous temperature values, instead of a temporal variation of the at least first temperature measurement signal by also taking into account temperature values sensed in the past by means of said first temperature sensor, as claimed in the present application.


Accordingly, it is believed that claims 22 - 43 and new claims 43 - 51 should be in condition for allowance.

A certified copy of German priority application No. 102 57 322.0 is being submitted herewith.

Respectfully submitted,

Date: August 22, 2005

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